

DATE OUT: 08/JAN/2002

SUBJECT: PRODUCT CHEMISTRY REVIEW OF: Manufacturing-Use [] End-Use Product [X]
DP BARCODE: D286062 EPA RECEIVED DATE: 17/SEP/2002 FILE SYMBOL/REG # 1021-RTOL
PRODUCT NAME: Multicide Fogging Concentrate 2798 MRID.: 457629-08 & -09
COMPANY NAME: McLaughlin Gormley King Company ACTION CODE: 165

FROM: Sami Malak, Chemist *S. Malak*
Technical Review Branch/RD (7505C)

SBM 1-8-03

TO: 03 Arnold Layne/Linda DeLuise
Insecticide Branch/RD (7505C)

INTRODUCTION:

In a letter dated 13/SEP/2002, the applicant requested registration of subject product as per the regulations of FIFRA sec. 3(c)(5). Included with this submission were: product chemistry data, a proposed basic and one alternate CSFs both dated 11/SEP/2002, a proposed label EPA received 17/SEP/2002, certificate with respect to citation of data, formulator's exemption, and data matrix.

FINDINGS:

- 1a. The subject product is produced by a non-integrated formulation system, meaning that the three active sources in the product are registered. The product contains 1.0% Prallethrin contained in Multicide ETOC 90% Concentrate, Reg. No. 1021-1621; plus 5.0% Sumithrin contained in Multicide Sumithrin 90% Concentrate, Reg. No. 1021-1383; plus 5.0% Piperonyl butoxide, Reg. No. 1021-974.
- 1b. The subject product, an insecticide, can be diluted with light mineral oil (not water) and applied aerially or by ground equipment for mosquito control in outdoor residential and recreational areas.
- 2a. The applicant should be advised to submit the results of the storage stability, a product chemistry data requirement of GRN 830.6317). The study can be conducted using the basic formulation.
- 2b. Except for the data gap in finding 2(a) above, the submitted/referenced product chemistry data is adequate and support a FIFRA Section 3(c)(5) registration of subject product.
3. Adequate analytical methods are available for enforcement. The methods were previously submitted and reviewed in connection with registration of the technical sources, Prallethrin contained in Multicide ETOC 90% Concentrate, Reg. No. 1021-1621; Sumithrin contained in Multicide Sumithrin 90% Concentrate, Reg. No. 1021-1383; plus Piperonyl butoxide, Reg. No. 1021-974.

An analytical method was included with this submission, MRID #457629-08, entitled "GLC Method of Analysis for ETOC, Sumithrin and Piperonyl Butoxide In Multicide Intermediate 2798." The same method was also included in MRID #457629-09. The method is a gas chromatograph equipped with a flame ionization detector and employs dibutyl phthalate as an internal standard.

4. The label claim nominal concentrations of 1.0% Prallethrin contained in Multicide ETOC

90% Concentrate; plus 5.0% Sumithrin contained in Multicide Sumithrin 90% Concentrate; plus 5.0% Piperonyl butoxide; are consistent with those in the CSFs, both are in compliance with the regulations of PR Notice 91-2. Further, the storage and disposal statement and physical or chemical hazards statement are in compliance with the regulations of 40CFR§156.10.

5. The submitted product's basic and one alternate CSFs both dated 11/SEP/2002 were filled out correctly and completely and agree with the label claim nominal concentration as per the regulations of PR Notice 91-2. Further, the upper and lower certified limits are within the standard limits of 40CFR§158.175(b)(2). All ingredients claimed on the CSF are cleared for use in pesticide formulations intended for non-food uses.

CONCLUSIONS:

After resolving Finding 2(a) above, TRB will have no objections for a FIFRA sec. 3(c)(5) registration of subject product. The submitted product's basic and one alternate CSFs both dated 11/SEP/2002, and label are acceptable as per Findings 4 & 5 above.

REVIEW OF PRODUCT CHEMISTRY DATA:

1. A statement of data confidentiality dated 01/MAR/2001 was included with this submission claiming no confidentiality of any of the submitted data on the basis of its falling within the scope of FIFRA§10(d)(1)(A), (B), or (C).
2. A GLP statement dated 01/MAR/2001 was included with this submission to the effect that the submitted studies were conducted in compliance with the GLP requirements of 40CFR§160.

DATA SUBMITTED

MRID #457629-08 The submitted study entitled: "Product Chemistry of Multicide Fogging Concentrate 2798, Data Requirements of Guideline Numbers 61-1 to 63-21." The studies were authored by Brice D. Besser; Performed by McLaughlin Gormley King Company of Minneapolis, MN; Completed on 01/MAR/2001 (12 pages).

MRID #457629-09 The submitted study entitled: "Product Chemistry of Multicide Fogging Concentrate 2798, Data Requirements of Guideline Numbers 61-1 to 63-21." The studies were authored by Brice D. Besser; Performed by McLaughlin Gormley King Company of Minneapolis, MN; Completed on 27/MAR/2001 (10 pages).

Group A, Series 830-Product Identity, Composition, and Analysis (40 CFR 155, 160, 162, 167, 175 & 180)

830-1550 Product Identity and Composition

The subject product contains three registered technical grade of active ingredients plus cleared inert ingredients (refer to product's CSFs, all dated 11/SEP/2002).

A method was included with this submission, MRID #457629-08, entitled "GLC Method of Analysis for ETOC, Sumithrin and Piperonyl Butoxide In Multicide Intermediate 2798." The same method was also included in MRID #457629-09. The method is a gas chromatograph equipped with a flame ionization detector and employs dibutyl phthalate as an internal standard.

Method validation data regarding recovery, accuracy, precision, and linearity are adequate. Sample chromatograms and calculation were included with this submission.

830-1600 Description of Materials Used to Produce the Product:

Refer to Confidential appendix A.

830-1650 Description of Formulation Process:

Refer to Confidential appendix A.

830-1670 Discussion of Formation of Impurities:

Refer to Confidential appendix A.

830-1700 Preliminary Analysis:

Refer to Confidential appendix A.

830-1750 Certified Limits:

Refer to Confidential appendix A.

830-1800 Enforcement Analytical Method:

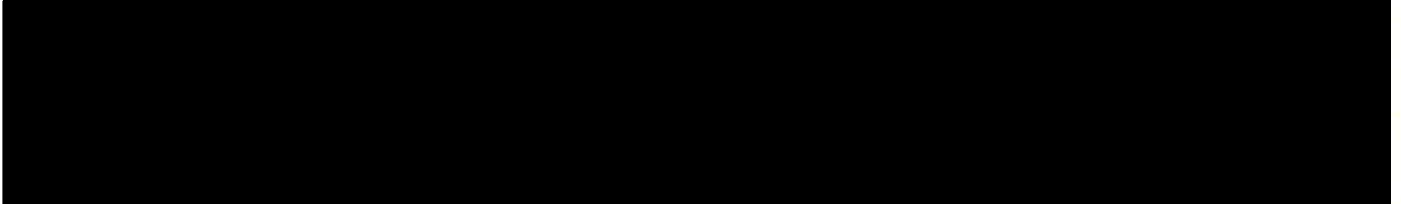
Adequate analytical methods are available for enforcement. The methods were previously submitted and reviewed in connection with registration of the technical sources, Prallethrin contained in Multicide ETOC 90% Concentrate, Reg. No. 1021-1621; Sumithrin contained in Multicide Sumithrin 90% Concentrate, Reg. No. 1021-1383; plus Piperonyl butoxide, Reg. No. 1021-974.

Group B, Series 830-Physical and Chemical Properties (40 CFR 158.190):

GUIDELINE REFERENCE NO.(GRN 830.)/TITLE	VALUE OR QUALITATIVE DESCRIPTION	
	Basic Formulation	Alternate Formulation
.6302 Color	Clear light yellow.	
.6303 Physical State	Liquid.	
.6304 Odor	Light aromatic odor.	Strong aromatic smell.
.6314 Oxidation/Reduction: Incompatibility	NA. Does not contain an oxidizing or reducing agent.	
.6315 Flammability/Flame Extension	166°F	> 200°F
.6316 Explodability	NA. Not considered to be potentially explosive.	
.6317 Storage Stability	No data was submitted.	
.6319 Miscibility	Miscible in aromatics, petroleum distillate, and alcohol. Immiscible in water.	Completely miscible in alcohol, aromatics, and petroleum distillate, Immiscible in water.
.6320 Corrosion Characteristics	Non considered to be corrosive to the packaging containers.	
.6321 Dielectric Breakdown Voltage	Not recommended for use around electrical equipment.	
.7000 pH	NA. Not miscible in water.	
.7100 Viscosity	13.35 cps @24°C	17 cps @24.0°C
.7300 Density/Relative Density Bulk Density	0.87 @20°C	0.904 @20°C

Confidential Appendix A830-1600 Description of Materials Used to Produce the Product:

The subject product contains three registered technical grade of active ingredients plus cleared inert ingredients (refer to product's CSFs dated 11/SEP/2002).

830-1650 Description of Formulation Process:830-1670 Discussion of Formation of Impurities:

The applicant reported no impurities $\geq 0.1\%$ by weight were known to be formed during formulation and storage of the product.

830-1700 Preliminary Analysis:

NA for this non-integrated product.

830-1750 Certified Limits:

The applicant reported the same ingredients at percentages and upper/lower limits as those reported on product's CSFs dated 11/SEP/2002.

Manufacturing process information may be entitled to confidential treatment